

ABSTRACT

A method of forming a constellation design, and a receiver having both a processor that generates the constellation design and having a comparator. The particular constellation design described herein reduces errors resulting from a noisy communication channel. The generated constellation design includes a minimum threshold and a maximum threshold representing a variable range for each of a plurality of possible message levels. The constellation design accounts for the interrelationship between signal strength and noise in the communication channel. The comparator identifies the transmitted message by comparing the received signal with the generated constellation design.

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